Fertilizer Stock Solutions

For Watercress

Stock solution A consists of 1 lb/gal Chem-Gro 8-15-36 or Chem-Gro 4-18-38 (Hydro-Gardens, Colorado) hydroponic fertilizer plus 0.6 lb/gal of magnesium sulfate.

Stock solution B consists of 1 lb/gal of soluble grade calcium nitrate.

Stock solutions are added in equal volumes to prepare a nutrient solution with an electrical conductivity (EC) of 1.5 mS. If one does not have an electrical conductivity meter, then ½ ounce or 1 tablespoon of stock solution A and ½ ounce or 1 tablespoon of stock solution B should be added to each gallon of water in the tank.

One inch of water depth on 1 square foot = 0.625 gal of water.

Therefore, one inch of water in a 4 ft x 8 ft tank (32 sq. ft.) = 20 gallons. A full tank of water in a 4 x 8 ft tank which is 5.5 inch deep = 110 gallons and would require 55 ounces of stock solution A and 55 ounces of stock solution B.

Each stock solution should have its own measuring cup and stirring rod. Stock solutions should be kept separate when in a concentrated form, because they will react. However, these solutions do not react when mixed in the dilute growing solution.

These instructions only apply to growing watercress with Chem-Gro 8-15-36 or Chem-Gro 4-18-38.

We have not grown direct-seeded watercress with other hydroponic fertilizers, nor have we conducted trials with other hydroponic fertilizers on watercress. It is believed that other hydroponic fertilizer formulations also may be used to grow watercress successfully. The grower would be advised to follow directions on the fertilizer label.